

WHAT IS CLAIMED IS:

1. An inspection pretreatment method of bovine spongiform encephalopathy, comprising:

5 a first step for homogenizing cells of a parent specimen;

a second step for dispensing a predetermined amount of the homogenized parent specimen so as not to include any solid, thereby preparing a child specimen;

10 a third step for decomposing protein with regard to the child specimen;

a fourth step for heating the child specimen in which protein is decomposed at a first predetermined temperature to incubate;

15 a fifth step for adding a reagent B for coloring blue the incubated child specimen;

a sixth step for performing a centrifugal separation treatment on the blue child specimen and discarding/disposing a supernatant liquid;

20 a seventh step for condensing the child specimen from which a supernatant liquid is discarded/disposed;

an eighth step for heating the condensed child specimen at a second predetermined temperature which is higher than the first predetermined temperature to incubate;

25 a ninth step for diluting the incubated child specimen; and

a tenth step for dispensing and adsorbing a

predetermined amount of child specimen to a well of a micro-titer plate and preparing a sample for inspection for detection of pathogenic prion protein.

2. The method according to claim 1, wherein the
5 third step adds enzyme material proteinase K to the child specimen to decompose protein.

3. The method according to claim 2, wherein the fifth step adds enzyme material proteinase K to the child specimen to blue the child specimen.

10 4. The method according to claim 3, wherein the seventh step adds a reagent C1 to the separated specimen to condense the child specimen.

5. An inspection pretreatment system of bovine spongiform encephalopathy, comprising:

15 a specimen conveyor including at least one pair of belt conveyor type conveyance lanes and disposed so as to be capable of conveying a specimen container; and

a plurality of pretreatment devices arranged along a conveyance path of the specimen conveyor so as to
20 perform predetermined pretreatments,

the plurality of pretreatment devices comprises:

a carry-in unit which carries in a parent specimen container containing a sampled parent specimen and which mounts the container on the specimen conveyor;

25 a first barcode label issuing unit for attaching a barcode label on which predetermined information is recorded, the information including information

specifying the parent specimen and for attaching the label onto the outer peripheral surface of the parent specimen container;

5 a cell crushing device for homogenizing cells of the parent specimen in the parent specimen container to which the barcode label has been attached by the first barcode label issuing unit;

10 a dispenser unit which dispenses a predetermined amount of the parent specimen homogenized by the cell crushing device so as not to include any solid and which dispenses the specimen as a child specimen in a child specimen container;

15 a second barcode label issuing unit for attaching a barcode label having predetermined information recorded, the information including information specifying the child specimen and for attaching the label onto the outer peripheral surface of the child specimen container;

20 a parent specimen refrigerator for freezing the parent specimen container in which the remaining parent specimen is contained;

a child specimen refrigerator for freezing the container in which the child specimen is contained;

25 a first addition unit which adds and immixes a reagent to the child specimen container to decompose protein;

a first incubation device to heat the container

containing the child specimen whose protein has been decomposed at a first temperature to incubate the specimen;

5 a second addition unit which adds the reagent to the child specimen incubated in the first incubation device and which immixes the specimen until the specimen turns blue;

10 a centrifugal separation unit which subjects the child specimen obtained in the second addition unit to a centrifugal separation treatment to discard/dispose a supernatant liquid;

a condensation unit which condenses the specimen and which holds the specimen in a still state;

15 a second incubation device which heats the container containing the child specimen condensed by the condensation unit at a second temperature set to be higher than the first temperature to incubate the specimen;

20 a dilution unit which adds and immixes a predetermined amount of reagent D to the child specimen incubated in the second incubation device to dilute the specimen;

25 an inspection sample preparation device which dispenses and adsorbs a predetermined amount of the child specimen diluted in the dilution unit to a well of a micro-titer plate to prepare a sample for inspection for detection of pathogenic prion protein;

and

a carry-out unit which carries the sample for inspection prepared in the inspection sample preparation device out to an inspection chamber.

- 5 6. The system according to claim 5, wherein the plurality of pretreatment devices are controlled by a controller.